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FIELD DIARY

Mr. E. A. Goldman

(Official title.)

Period, Jan. 20 to Feb. 19, 1926

Mexico  
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Jan. 20, 1925  
Left Washington, D.C., 9.35 P.M.  
for Austin, Tex., en route to the  
City of Mexico.

Jan. 21, en route.  
In morning in North Carolina.  
Weather cloudy, cold and threatening.  
Passed Atlanta, Ga. in late afternoon.

Jan. 22, en route.  
Arrived New Orleans early in  
morning. Quite cold for New Orleans.  
About 38° at 8 o'clock A.M. and  
temperature dropping. Cloudy and  
a cold wind blowing. Left at 12.10  
P.M. Green leaves noted on some of  
the shrubs, and green grass and  
herbage in places in the swamp  
country traversed in Louisiana.  
Arrived at Houston where I changed  
/

Jan. 22 con.  
Trains. at 10.45 P.M. and left at 11.20  
for Austin.

Jan. 23. Austin, Tex.  
Arrived here 6.40 A.M. Weather cold,  
a snow storm began about 5 A.M.,  
and it snowed rather lightly, but  
nearly continuously all day, but  
checked up in evening when it was  
estimated at least 2 inches had fallen.  
Snow melting on some of the pavements  
about as fast as it fell. Very  
unusual weather for Austin.

Went to office of Turner E. Hobby,  
Fish and Game Commissioner and  
learned he was out of town, but was  
called on telephone and I am to  
meet him tomorrow.

Jan. 24 (Sun.) Austin, Tex.  
Heavy snow in morning, but  
aband about 10 A.M. and snow  
began melting very fast - much  
of it gone by late afternoon in  
the town.

Met Col. J. E. Hubby in late  
afternoon, had satisfactory con-  
ference with him and left at 7 P.M.  
for Laredo.

Jan. 25 (Mon.) Laredo and  
en route to Mexico.

crossed the border at 8.30  
A.M., and left Nuevo Laredo at 10.55  
A.M.

Route as far as Monterrey which  
was reached in the evening is  
over generally level plains with  
mountains rising steeply in places  
only a few miles. These plains  
are fairly well over grown with

Jan. 25 con.

small mesquites, tinisaches (Acacia farnesiana) with Croton a fairly abundant species in places. Several <sup>low-growing</sup> species of cactus and yuccas are also common.

Mountains appear notably south-west of Villaldama, and appear to rise to perhaps 4000 feet, their tops covered with what ~~seemed~~ to be low-growing timber. These mountains are precipitous in places and deeply scored by steep-sided canyons. Had a good view of Cerro de la Silla from Monterrey. The town seems to be half-encircled by fairly high mountains, with Cerro de la Silla in an outlying group.

Many pepper trees - "árbol del  
peru" (Schinus molle) seen along  
the way most of the day, and  
while there tend to be most in  
evidence along fence rows they  
also grow ~~singled~~ with the  
general growth of cacti and  
tree yuccas which in places  
become practically forest as  
a dominant type. A few  
Taxodium of fairly large size  
seen along streams.

Jan. 26. en route City  
of Mexico.

Early in morning we were a  
short distance south of San  
Luis Potosí and here and ex-  
tending far to the southward the  
rolling, dry plains bear in  
many places a heavy growth  
of desert vegetation. Much larger  
cactuses, including the large  
nopal - the tuna product were  
in evidence often towering over  
the one story native houses  
along the way. Some of these  
are picturesquely set in tuna  
cactus growth close to the  
walls and tree yuccas also  
grow close about them. Another  
large cactus much in evidence  
is the garambullo. At many  
points along the way the  
natives were out in force selling

Jan. 26 con.

oranges, sweet limes, granaditas, and many other things including a few inferior opals. Some small orchards near railroad stations were heavily loaded with the refining sweet limes.

Zones, country seen all along the way yesterday and today seems easily assignable to Lower Sonoran zone to a point not definitely determined north of the Valley of Mexico where in reaching a higher altitude the familiar types of desert veg. disappear, the country becomes more open and grassy and small oaks appear on the slopes of the hills apparently marking the lower edge of upper Sonoran zone.

6) arrived city of Mexico 8 P.M.

Jan. 27 (Wed), City of  
Mexico.

Routine business today. Made  
two trips to American Embassy.  
Saw ambassador James R. Sheffield,  
and Counselor of Embassy H. F. A.  
Schoenfeld.

Jan. 28 (Thurs), City of  
Mexico.

Went in morning to Museo Nacional  
de Historia Natural and learned that  
Prof. Alfonso Herrera is in Orizaba  
and that Sr. Contreras is acting  
director in his absence. Went with  
Sr. Contreras to the Secretaría de  
Agricultura y Fomento and had  
a satisfactory conference with  
Jose R. Alcaraz, Director <sup>General</sup> de  
Caza y Pesca, and made an



Jan, 28 con.  
appointment to meet the Secretario  
de Agricultura y Fomento tomorrow  
at noon. In afternoon went again  
to Museo Nacional and after  
meeting through Sr. Contreras the  
ornithologist, Prof. Valentin Santiago,  
who is to accompany me we visited  
the zoological park near Chapultepec.  
In the late afternoon presented a  
letter from the American Embassy  
to the Secretaria de Relaciones  
Exteriores, An under secretary who  
seemed to be very friendly  
promised to take the matter of  
circular letters up with the  
Secretary and send letters to my  
hotel.

Jan. 29 (Fri) City of Mexico.

Spent morning in making trips to three principal markets of the city to get information in regard to sale of ducks.

Ducks in market. Four species were found in the markets today. The largest number all told, was in the market of San Juan de Leluan where there were about 200 for sale at 10 a.m. Most of ~~these~~ were plucked except for the heads, but a considerable number were unplucked. The species in about equal proportions were *Dasia acuta*, *Spatula clypeata*, *Querquedula discors* and *Nettion carolinense*. Part were said to have been brought from Lake Texcoco, and part

Jan. 29, con.

from a place called El Peñon.  
Market people say they begin  
to come in in November and  
leave in the latter part of  
February. The birds were not  
fat.

Afternoon devoted to  
routine matters. Had a talk  
with George Wythe, Asst. Commercial  
Attache' of the American Embassy.

Visited Dirección de Estudios  
Biológicos and met the Sec.  
of the Director, Dr. Leopoldo  
Flores and the Administrator  
of the office Prof. Marcos Becerra.

Jan. 30 (Sat), lcty of Mex.  
Trip to open water area near El  
Prión.

Ducks. Here no shooting of any  
kind is permitted by the owner.  
Ducks were massed on the water  
giving it a dark color relieved  
by the white breasts of the  
pintails. Estimated here <sup>75000</sup> 50,000  
ducks of which about 60% were  
Anas platyrhynchos and most  
of the remainder <sup>about 25%</sup> Anas acuta,  
with 10% Anas diaconus  
and the remainder a sprinkling  
of Nettion carolinense and  
Spatula clypeata, and other birds  
as follows: Fulica americana  
a few in the edge of the marsh  
mainly.

Therion hudsonius. 1 male flying  
over ducks, that showed a little  
11

Names furnished by Lopez

Zarceta coyota } 2. ~~cyanoptera~~  
" colorada }

Zarceta de verano - 2. discors,  
come early as September, especially 1st.

Zarceta de invierno - 2. carolinense.

Jan. 30 con.  
uneasiness as it passed, a few  
rose a few feet from the water  
and settled down again.

Colymbus dominicus, several  
small grebes apparently of this  
species.

Melospiza, a few song sparrows in  
flocks and a small cove in edge  
of water.

Ardea herodias

Pyrarnus vociferans

Pelecanus (wh) - About 100 flying over  
valley bottom west of Pinar del Rio.

Jan. 31 (Sun), City of  
Mexico.

Remained in town - no official  
work.

Feb. 1 (Mon), City of Mexico,  
Made a trip with guide furnished by the Director Forestal y de Caza y Pesca to various points near the old bed of Lake Texcoco to investigate use of arroyos. We found however, that the only ones in that section had been fired early this morning. A high wind filled the air with dust and conditions for work were not very favorable. We examined the ducks being brought out by canoe from one of the arroyos of these ducks there were about 150 about equally divided between pintails, blue-winged teal and spoonbills, with a few cinnamon teal. We went on.

Feb. 1 con.

as far as Los Rios on the  
Interoceanic R.R. south of Lake  
Texcoco near where arvadars  
are placed, but owing to high  
wind none were in use  
today.

Arvadars, Learned from guide  
that the arvadars are moved  
frequently from one place to  
another. A special permit is  
required by the operator and  
they are authorized to fire  
a battery only twice a week.  
A battery consists ordinarily of  
110 guns, but sometimes double  
this number are used.

Ducks, Near Prión I had an  
opportunity to see again the  
place visited Saturday and  
found a similarly large

Feb. 1 con  
number of birds there. I got the  
impression today that there  
was perhaps a larger proportion  
of pintails. My guide said it  
is the only place that ducks  
are never shot at. It belongs  
to the Cervantes estate and he  
told me that the owner had  
refused 300 pesos for permit  
to fire a single armada.

In afternoon saw Mr. C. G. Ray,  
who has lived in this country  
23 years and is an enthusiastic  
hunter and undoubtedly well-  
informed. Mr. Ray says ducks  
in general are decreasing in  
numbers in and about the  
Valley of Mexico and he ascribes  
this to the use of the "armadas".  
He estimates that there are 50



Feb. 1 con,  
arvadadas in the state which are  
fired at least once and many  
of them twice a week from the  
1<sup>st</sup> of Nov. to the end of March.  
As many as 2000 are killed  
at a discharge, the number of  
guns being usually about 100  
but another 100 is sometimes  
set above them and all fired  
simultaneously. Mr. Ray says  
there are not more than 50  
Mexican hunters who hunt for  
sport, and he does not seem  
to consider them real  
sportsmen. He is not in favor  
of having enacted a complicated  
set of game laws that will  
not be enforced. He favors  
only 2 measures, the stopping  
of the use of arvadadas and the

Feb. 1 con.

trapping of ~~Bob~~ white quail,  
which he says is carried on  
on a large scale for market.

Cochino, Mr. Ray hunts quail  
near Guernavaca, about the 5<sup>th</sup>  
of December last he made a trip  
and found that many of the birds  
were very small, these being late  
hatched young, and he says that  
these birds were just becoming  
worth while to shoot yesterday  
when he was down there. Formerly  
he hunted quail in the Valley  
of Mexico, but he says they  
are all gone. They are taken  
in traps at all seasons for  
market, and this should be  
stopped, but he does not favor  
restricting the season for  
shooting.

Feb 1, con.

Mareca americana, Mr. Ray says these ducks occur in rather small numbers.

Anas platyrhynchos, Mr. Ray says he first saw this species about 6 years ago, but they are not very plentiful.

Aristonetta valisineria, Mr. Ray says canvas-backs first appeared about 6 years ago and are becoming rather common.

My guide told me that he found one outfit using an armada before the opening of the season, Nov. 1<sup>st</sup>, and one man threatened him with a gun, but he shot the man through the arm with his pistol. The owner of the armada was fined \$500. This was the reason.

Feb. 1 con

Lake Texaco has been in process of being drained through the Grand Canal leading to the lagoon of Zumpango for many years. Along the line of the Antioceanic R.R. leading to Los Reyes the embankment now serves to some extent as a dam as shown by the height of the water on the south side along the track and the drained condition on the Lake Texaco side (north or north east side). Great clouds of whitish dust rise from the vicinity of the old lake bed whenever the wind blows, and this has become troublesome in the city.

Feb. 2.

Name of guide Simas Arriola.  
Started out 8:30 a.m.

Don Carlos Lopez tells me  
that no one is allowed  
shot with shot gun within  
2000 metros of an armada  
while it is being placed  
or within this distance of  
its position.

Made trip to vicinity of Cerro del  
Peñon, but found that owing to  
windy weather armadas had not  
been placed.

Feb. 3.

Cratogeomys merriami. Many workings seen in pulque plantations near Zumpango. Soil here is rather sandy, but forms a deep rich, rather dark loam.

Carpodacus m. frontalis. Singing about houses at Zumpango. Common here.

Tamias l. eximius. Several seen along road near Zumpango.

Aythya valisineria - at least 2000 seen on Lake Zumpango; and about the same number on open water in another lake - Abasco ~~Estero de San Mateo~~ de San Mateo.

Feb. 3 (Wed.), City of Mexico. Trip to Zumpango and return. Left City of Mexico at 8:30 A.M. and followed main road by motorcycle and side car through Villa Guadalupe to Zumpango. The Laguna of Zumpango occupies a large part of the bottom of a valley is irregular in outline and several miles in diameter, located in a valley somewhat lower than the Valley of Mexico, like which it is said to have no natural outlet. The water here is not at its highest former level, but is said to be higher than usual owing to abundant rains during the season. A dike across the valley holds the water off a large area that is cultivated to corn and wheat.

Feb. 3 con.

Grand Canal. This canal begun in 1879 and completed in 1900 has largely drained the Valley of Mexico and relieved the menace dating from colonial times of the inundation of the City by Lake Texcoco. The canal perhaps a 100 feet deep where it enters a tunnel near Zumpango was enterprised regarded as a great engineering feat in Díaz' time. It carries the sewage of the city and when I saw it was a swiftly running stream 15 or 20 feet wide and apparently several feet deep. The water is dark and has the usual sewage stench. During <sup>a following</sup> heavy rain ~~on~~ it carries a much larger volume of water. It is obviously responsible, along with the canal

Feb. 3 am.

system leading to it, for the  
marked lowering of water which  
according to Mr. C. G. Ray has  
exposed about 600 square  
miles of valley bottom.



Feb. 4, Valley of Mexico, Mex.  
Long trip to various parts of the  
valley, including Puñon de los Baños,  
and Chalco by motor cycle and  
side car.

Left town about 7.30 A.M. and  
visited first various points on  
the old Lake Texcoco bed near  
Puñon de los Baños. Located an  
arvoda, but could not examine  
it and after waiting about 2 hrs.  
in hopes it would be fired my  
guide Genaro Arriola took me to  
points on the former bed of  
Lake Chalco. This included the  
former Hda. of Tico formerly  
~~practically~~ an island rising  
from the lake. This is a volcanic  
hill about 300 feet high. From  
this point I had excellent views  
over a wide expanse of former

Feb. 4 con.

lake area. Water is now limited to small areas on which there were a larger number of ducks, but these I was unable to approach.

Lake Abasco. This large <sup>lake</sup> ~~area~~ is to have been drained except an area of perhaps 100 acres surrounded by marshy ground. Much of the former lake bed has been cultivated, largely in corn and wheat, but during recent years has said to have become unproductive and is largely abandoned. The ~~good~~ soil is dark and one would suppose should be fertile, but although there is plenty of moisture the size of corn stalks, in addition to reports of people is evidence that

Feb. 4. am.

crops do not thrive.

owing to a broken spring and  
the trouble we were obliged to  
leave our machine about 10  
kilometers out of town and  
return in a "camion".

Feb. 5.

Nycticorax n. naevius, Several seen in marsh near Piñon. Also about a dozen noted in trees in Alameda.

Catherpes mexicanus, Several common were noted in buildings in heart of city. One on National Theatre.

Coccyx li-cavus back.

Feb. 5, City of Mexico,  
Trip to near Piñon, but was  
unable to locate armada.

Feb. 6. City of Mexico,  
Remained in town conferring  
with officials.

Feb. 7. (Sun) City of  
Mex. No official work.

Feb. 8, City of Mex.

~~Top~~  
Anas albifrons, Lopez claims  
that this is the goose that  
most frequently enters the valley,  
especially of Lake Chapala,  
of Mex.

~~Anas~~ <sup>Fulva</sup> hyperborea. Lopez says  
carries here at times in hard  
countries, but he has not seen  
them except farther north.

Feb. 8 cen.

Chichiguilobos (plains in  
(gravel) yellow logs etc.

Come about middle of Aug, and Sept  
Killed with armadas and nets  
Leave and return north in  
May.

Barthanna - formerly in  
large numbers, but now very  
few. Lopez thinks they take  
a route through Moilas  
where a good many are  
now seen. Perseus was  
here. He thinks they have  
changed route to avoid per-  
secution.

Trip today Páton Viejo. Considerable  
change there since for detailed  
examination Jan. 30. Today found  
the following: Dafila acuta  
in great preponderance, probably

Feb. 8 con

70%, with in abundance  
Querquedula discors 20% - 2.  
eganoptera 5%, Asistonetta  
volisivira 4%, Nettion carolinense  
1%.

All of these are more or less  
mixed together. Flocks of various  
birds often form small groups  
by themselves. ~~Canas~~ Dafila  
acuta busy feeding, standing  
straight on their heads.  
~~Canas~~ backs diving among  
them in open water.

Feb. 9. (Thurs.). City of Mex.

Made a trip to the Abasco of Pánuco  
Viejo where I saw about 100,000  
ducks, as I looked over a larger  
area than had been visited pre-  
viously.

Feb. 9 con.

Ducks. Those seen today were preponderantly Dafila acuta, with D. cyanoptera second, and D. discors third, and a comparatively small number of Aristonetta valisineria.

Dafila acuta, with sun in favorable position these ducks in large numbers present a wonderful sight feeding, standing on their heads, two long tail feathers now growing out projecting nearly straight upward as they balance themselves by paddling with their feet.

Aristonetta valisineria. These ducks appear scattered among the pintails, swimming and diving, their motions in marked contrast to those of the pintails.

Querquedula cyanoptera. These swim among the pintails, or in flocks

Feb. 9 con.

by themselves, especially along the borders of the gravel wash, where they often work out among the coarse vegetation in the shallower water.

Botaurus lentiginosus, I saw was flushed from the wash at Peñon Viejo today.

Carinodora egretta, a white heron that I took to be this species was seen flying.

Colymbus nigricollis californicus <sup>nigricollis</sup> a grebe that appeared to be of this species was seen today at Peñon Viejo.

Feb. 10 (Wed), City of Mexico, conferring with officials. Saw Lopez in morning and had talk with Mr. C. G. Ray. In afternoon saw Herrera and identified some mammals.



Feb. 10 em.

for him at Museo Nacional where  
I also met his assistant in charge  
of mammals, Prof. Alfonso M. Toboada.

Mr. Ray gave information as  
follows:

Dafila acuta, Arrive from 1 to  
15 of Dec. (Ray)

Luzquedula discors

~~Luzquedula~~

Nettion carolinense

} First ducks to  
arrive in fall  
the blue wings

in large numbers and green wings  
in smaller numbers. (Ray)

Aristonetta valisineria. Begin to  
arrive about middle of Jan. and  
increase for some time. (Ray)

Nyroca americana, A few come  
along with canvas backs (Ray)

Mareca americana. A few arrive  
between Jan. 1 and Jan 15 (Ray).

Anas platyrhynchos, A few arrive  
in January. Not seen until about

Feb. 10. con.  
6 years ago. (Ray).

Anas - a fine black mallards  
seen during winter, but very  
rare (Ray) large?

Melospiza. Ray suggests ~~low~~  
open season on turkeys should  
end by March 1<sup>st</sup> when they  
begin to gobble he says.

Colinus. Ray suggests open  
season on quail should be  
Jan, Feb. & March to ~~also~~ avoid  
breeding season and shooting of  
many immature birds.

Ducks. Counted by manos, Ray  
says 4 ducks 1 mano and he  
thinks 8 manos make a cuato.

Anser. a. albifrons. Ray says  
white-fronted geese come pretty  
regularly as far as Lake Chapala  
where he has hunted them, but he

Feb. 10 am.  
thinks they leave about Feb. 15,  
He has never seen any geese in  
the Valley of Mex.

Feb. 11 (Thurs). Left of  
Mex. Trip in search of arroyos.  
Found one being plowed near  
Piñon Viejo and took pictures.

Arroyo. Mud was built up  
about 1 foot above water in sim-  
circle as support for 116 guns. Mud  
covered with hay. Guns placed  
<sup>about 3 inches apart</sup>  
~~close together~~, all but one were  
simply barrels of old muzzle  
loaders or small gas pipes about  
 $\frac{3}{4}$  inch inside diameter, each was  
fastened at base to a piece of  
wood used as ~~an~~ anchor.  
A few stumps of ~~gas~~ wedge placed  
in muzzles of guns said to  
prevent whistling if wind should

Feb. 11 con.

Blow as this scares ducks.

Guns concealed by grass, cut and laid over them. Fired by train of black powder connecting all with central gun which has a hammer and cap. Train of powder covered by pieces of sheet iron laid side by side. Fired by pulling string several hundred yds. away. Amvoda showed by 10 min. head of a captain. Ducks sold to dealers at about 12 1/2 cents each. Men grumbled at my approach, and were evidently not very anxious that I should see how work was carried out.

Feb. 12, City of Mex.

Trip to near Pinar Viejo where two arrodas were fired and pictures finally secured. Went with several arrodas and motorcycles - side car very early in morning to a place where we were told yesterday one would be fired.

Arroda. We arrived about 8 AM just in time to see arroda fired and to reach the ground before the ducks were gathered. Men surrounded the area over which the birds were shot, gathering birds and closing in gradually. When they narrowed the circle to a point just inside the arroda about 50 crippled ducks were left and

Feb. 12 con.

these were killed by being  
chuffed - struck over the head  
with sticks, one grabbed in  
the water and neck wrung.  
When gathered the birds were  
towed into a chalupa, as a  
canoe is called here. The  
ducks were largely spoonbills,  
with considerable proportion  
of L. discors<sup>113</sup>. Guns of which  
there were 100 here were  
dismounted by the discharge,  
some thrown backward into  
the water. Ducks killed about 500.

Arrada, at another arrada -  
the one located yesterday when  
it was being arranged, I found  
about <sup>9 o'clock</sup> noon that the men were  
watching from the ditch banks  
within about 400 yards. About

Feb. 12 con.

2000 pintails were <sup>mostly</sup> ~~grouped~~  
in lines and bunches in ~~the shallows~~  
water ~~about~~ 2-3 feet deep, in  
which coarse sedges were growing.  
A considerable number was  
in front of the guns and within  
range, but others were being  
very slowly herded in by men  
using 2 horses which were led  
along, the men walking on  
the outer side near the horse's  
shoulder. Very slowly and  
carefully the ducks were  
rounded up, the men with  
the horses making long stops  
in places and waiting for  
the birds to move slowly  
in the direction desired. This  
operation took about 3 hours,  
the armada being fired at  
11:30 A.M. I had arranged for

Feb. 12 am.

a canoe to ~~to~~ take me to the  
spot where the arvoda was  
located, but the river closed in  
so rapidly I did not reach it  
until the ducks had been  
gathered. Secured photos of ducks  
in canoe, and of the general  
excitement following the firing of  
the arvoda. About 500 ducks were  
killed, all of them pintails, 10  
were were partners in this  
arvoda, under one of ~~of~~ their  
number, called the capitán.  
The horse used in herding  
ducks is called the "Sancho".  
One of the owners explained to me  
that 2 pintails are counted as  
a "mano", but it takes 3 forbills  
and 4 teals to count as a mano.  
Eight manos are one "cunto" and  
a total number of cuntos make up



Feb. 12 con.

the bill. The birds are gathered and counted in this way, and then divided among the "series". Purchasers sometimes take the birds on the ground, ~~and~~ The price paid varies widely and I was unable to get very definite information as those interested were reluctant to talk or furnished what I believed to be ~~my~~ <sup>about</sup> information. In the market 90 cents is asked for pintails. Teals are worth about 40. Two were offered for 75. ~~#~~

Pinon Viejo. Many ducks still on large charcos at this point. Those seen today largely pintails and 2. divers.

Feb. 13, City of Mex.

Day spent in getting routine  
out of way. Went to Museum  
and identified a number of  
mammals for Herrera.

Feb. 14 City of Mex.

Trip to Grutas del Tuxtla, with  
Erriola, also to Lake Xochimilco.  
Grutas del Tuxtla are caves in  
the side of a volcanic cone  
about 1000 feet high (above the  
valley) near Tuxtepec.

Leptomys nivalis. This species  
in a colony of hundreds lives in  
summer in ~~the~~ one of the Grutas  
del Tuxtla, but evidently migrates  
in winter as we found no very  
recent signs of their occurrence.

Xochimilco, Examined propagating  
gardens of Dept. of Agriculture, at the

Feb. 14 con.

point where trees and plants of various kinds are grown for distribution said to be largely to agricultural schools. The chinampas are now fast lands, the water being much lower than formerly. The city water supply comes from large springs formerly under Lake Xochimilco which has now been drained. A fine water plant to supply the city was finished in 1910 at a cost of 17 million pesos. This includes a pumping plant to provide sufficient pressure to carry the water in large volume to the city. Salix pyramidalis is the tall willow growing so abundantly on the bed of Lake Texcoco according to man in charge propagating gardens.

42 Feb. 15, City of Mex - Pontre

Feb. 16, City of Mex.  
Principal day of carnival and  
everything closed.

Feb. 17, City of Mex. to  
Lerma.

Left Mexico 3 P.M.; arrived Lerma  
5.38. Train climbed over <sup>Sierra</sup> Cerrito de  
las Cruces.

Zones. Passed through pine belt,  
including moderns evidently  
Transition. Upper slopes in fir  
and spruce, Cedars, and  
on descending into Valley of Toluca  
noted that pines extend well  
down toward valley bottom.

Feb. 18, Lerma

Trip by canoe. Lerma river  
much choked by water  
hyacinths.

*Melospiza*

43 *Colaptes auratus* - sent for cow food.

Feb. 18 con. ~~XDT~~

*Podilymbus pod.*

*Anas diazi* - pate real local name. Said to remain all year. A pair flushed from tules. Also seen in small flocks of 20 to 40.

*Jacksnipe* - *agachona* - flushed from marsh. Said to be common in places and rivers all winter.

*Pintail*, said to be most common duck, about 3000. "golondrina"

*Mareca americana*. Several seen. Local names "panadero" and "socanatti".

*Linguedula cyanop.* about 2000.

*Spoonbill*. A few. local name "bocon" and *cuansuñis*.

*Linguedula discors*, a considerable number.

Feb. 18 con.

*Canvas back* - Three - local name "cuaco"

*Green-winged teal*, said to still occur, but not pointed out by me. Local name "golondrita"

*Falco* - about 2000, local name "gachureto"

*Ring-billed gull*, local name "sarcita coyota"

*L. cyanop.*

*Spoonbill*

*Canvas back*

*L. discors*

*Pintails*

*Say*

*L. discors*

*sarcita tulara*

About ducks *San Carlos de la*

*Manza*, north of *Terma* a few miles.

*Scythiops*

*Barn Swallow*

*Herons* *had.*

Feb. 18 con.

Man of Obasco de la Manza  
preparing an armada.

60 large ducks are called a  
"monton". = 30 manos. Now about  
4 or 5 montons are killed by an  
armada discharge, but at times  
15 or 20 montones.

Ducks are said to have been  
unusually few this year.

Ducks buyers pay about <sup>70</sup>20 a  
monton = 60 ducks.

Gallineros are also killed and  
count 3 to a mano.

About 10 or 12 armadas used  
near Lerma.

Feb. 18 con.

Effect of water on birds: In  
valley of Mex. it is believed that  
tequisquits or muskrat balls  
in water purge birds and give  
them good flavor. But in  
valley of Puebla they claim that  
the birds are better because the  
water is clean. They say that  
birds with white bellies have  
these stained in valley of Mex.  
while here the birds ~~have~~  
maintain pure white bellies.

Marsh, consists of a mixture of  
lutes and cattail flops - lutes  
about 8 ft. above water - interrupted  
by patches of various species of  
sedges.

Crotophaga, a few marsh  
wrens are heard giving a few  
guttering notes.

Feb. 19 (Fri.), Lerma to  
Acanbaw.

Left Lerma 9.55 A.M., drive at  
Tullwangs. Country high to this  
point, - level or gently rolling  
grassy plains, with numerous  
oaks in groups on the horizon,  
and a few pines  
extend down to within 500 ft.  
of the general level in places.  
Near Tullwangs we pass through  
a cañon with oaks along  
the banks and drop rapidly  
several hundred feet.

Valley of Toluca, where soil  
is entirely largely a level  
grassy plain country without  
considerable elevation.

Zones, Upper Sonora, I  
Valley of Toluca indicated by  
absence of pines and

Feb 19 con

near Tullwangs

Near Tullwangs, large  
oaks and pines appear at  
a level in valley. Back  
trees of small and in bloom.  
Some flowering plants have  
not been seen since we left  
the valley of Toluca.

Banana, Frost of Lerma  
best off, nearly not entirely  
killed.

Zones, Tullwangs (set 2295) still  
upper Son., but a short distance north  
and runs down rapidly into  
lower country considerable with  
pines and acacias, thickets of  
large Opuntia, and a few of the  
trees noted near Matamoros. Hills near  
Tullwangs in upper Son.

*Anas platyrhynchos platyrhynchos*

*Anas diazi*

*Anas rubripes neomexicana*

*Chaulelasmus streperus*.

*Mareca americana*

*Mellion carolinense*

*Rerguedula discors*

*Rerguedula cyanoptera*

*Spatula clypeata*

*Safila a. tztzihoa*

*Nyroca americana* - redhead

*Aristonetta valisineria*

*Fulix marila* - scarp

*Fulix affinis* - snow scarp

*Anas hypoborea* hyp. - Snow geese

" " nivalis - Greater snow geese

*Anas rossii* -

*Anas a. albifrons*

*Branta c. canadensis*





Feb. 10 - 1925 Swans in band  
number 25 far south of Fort Belknap

Blue wing = garceta de arroyo

Batrachoseps (large) comes  
about middle of Aug. and remains  
about a month on way south. Returns  
middle of May.

Dec. 28, 1925 - Smith wrote  
Kent, referring to letter from him  
and expressing surprise that  
he should have no permit -  
refers to a friendly letter  
Kent offered to mail from St. Joseph  
Mo.

Permit issued on a form  
of Swift Oct. 2, 1925 this  
was later, upped to a permit  
for Kansas - Oklahoma.

1 Kent's letter to me along with  
9 others was sent by mail and  
was received Jan. 6, 1925.